



2005 Annual Drinking Water Quality Report **Genoa Lakes/Sierra Shadows Water System**

Dear Water Customers:

We are pleased to present to you this “2005 Annual Drinking Water Quality Report”. This report is designed to inform you about the quality of the drinking water we deliver to you everyday. We are committed to ensuring the quality of your water and that of maintaining a safe, dependable supply.

Introduction:

When Congress passed the 1996 Safe Drinking Water Act amendments, the Environmental Protection Agency (EPA) was given the mandate to require public water systems to provide each customer with an Annual Water Quality Report, including test results every 12 months.

The report is meant to increase public awareness of drinking water issues and to serve as a means for customers to make informed decisions regarding their drinking water. Information regarding where the drinking water comes from, what is involved in treating and delivering safe drinking water, and any detected levels of contaminants must be included in the report.

Water Source:

Our water source is ground water taken from three wells in the Genoa Lakes/Sierra Shadows Community. Two of our wells are infiltration wells located on Genoa Lakes Drive with the other well located in the Sierra Shadows Subdivision off of Kinsey Lane. In addition this system has a booster station and two storage tanks. Treatment is not required, however disinfection with chlorine (sodium hypochlorite) and the balancing of the pH with caustic soda (sodium hydroxide) is accomplished at the booster station.

Protection:

Douglas County Utilities participates in a Vulnerability Assessment Program with the Nevada Department of Environmental Protection, Bureau of Safe Drinking Water @ 775-687-9520 to protect your drinking water.

Monitoring:

Douglas County Utilities routinely monitors for constituents in your drinking water according to Federal and State laws. Results of our monitoring for the period of January 1st to December 31st, 2005 are designated under “Test Results”. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Educational Statement:

Arsenic: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Environmental Protection Agency Safe Drinking Water Hotline 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems, Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Important Drinking Water Definition:

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	Y	PRESENT		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Radioactive Contaminants						
Beta/photon emitters	N	8.05	pCi/l	0	50*	Decay of natural and man-made deposits
*EPA considers 50 pCi/l to be the level of concern for beta particles.						
Alpha emitters	N	7.76	pCi/l	0	15	Erosion of natural deposits
Uranium	N	12	pCi/l	0	30	Erosion of natural deposits
Inorganic Contaminants						
Arsenic	N	2	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Barium	N	0.008	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	0.005	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	0.57	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	15	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	1.7	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Volatile Organic Contaminants

TTHM [Total trihalomethanes]	N	1.1	ppb	0	80	By-product of drinking water chlorination
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Units Description:

ppm: parts per million, or milligrams per liter (mg/l)

ppb: parts per billion, or micrograms per liter (µg/l)

pCi/L: picocuries per liter (a measure of radioactivity)

MFL: million fibers per liter, used to measure asbestos concentration

Microbiological Contaminants:

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation: The table shows that our system uncovered some problems this year in regards to coliform. The duration of the violation was for one (1) month. The potential adverse health effects that other, potentially-harmful, bacteria may be present, we have corrected this by increasing the average amount of chlorine in the distribution system.

Monitoring Violation: The Genoa Lake/Sierra Shadow Water System failed to monitor for Radium 228 during the 3rd quarter of 2005. We did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done once a week for four weeks to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Source Water Assessment Program (SWAP) Summary: The federal Safe Drinking Water Act (SDWA) was amended in 1996 to require states to develop and implement source water assessment programs (SWAP) to analyze existing and potential threats to the quality of public drinking water throughout the state. The 1996 Amendments also required a summary of the findings of the assessment to be included in the water system's annual Consumer Confidence Report (CCR). The 1996 Amendments specifically required states to delineate areas that are sources of public drinking water, identify potential contamination sources within the delineated area, assess the water system's susceptibility to contamination, and inform the public of the results.

SWAP Results: The Genoa Lakes / Sierra Shadows public water system is presently in compliance with all state and federal drinking water maximum contaminant levels. There were no identified sources of potential contamination to the aquifer providing the water to the water system. There is a moderate to low risk for Asbestos to contaminate the drinking water. Portions of the water distribution system have been constructed using asbestos cement pipe. The water system is presently in compliance with all state and federal Maximum Contaminant Levels for drinking water.

If you have any questions about this report or concerning your water utility, please contact Carl Ruschmeyer, Utility Engineering Manager at (775) 782-6227. We want our valued customers to be informed about their water utility. We at Douglas County Utilities work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.